**Notebook Series -- Pocket Notebooks**
**Notebook, PN-14-04-13**

The dated entries in this pocket notebook are from February-July 1914. The book was used by Edison to record ideas about business matters, experiments to be tried, and other tasks to be performed. Many of the items have been crossed out. At the beginning of the book are notes about phonograph orders and costs. These are followed by experimental notes relating to disc record development and production, chalk telephones, battery cell regeneration, and automobile batteries and charging stations. The business-related entries include notes about payroll and expenses in the Home Projecting Kinetoscope Dept. and working shifts in the Cylinder Record Dept. Also included are entries pertaining to record dealers and recording artists. In addition, there are notes about sales of Amberola records, kinetoscopes, and batteries, along with comparative data regarding the costs of using Edison batteries and those of competitors.

Among the numerous Edison employees mentioned in the book are master machinist Robert A. Bachman; John V. Miller, Edison's brother-in-law and manager of the Edison Chemical Works at Silver Lake; Walter H. Miller, head of the Recording Dept.; Sherwood T. (Sam) Moore, a principal assistant in the development of disc records; and Harold H. Smith, chief of the Battery Research Dept. The inside front cover is inscribed "Entered final April 28 1919." The pages are unnumbered. Approximately 125 pages have been used.

PN-14-04-13

E-1710

Phono for March.
orders

| | |
|---|---|
| Cylinder Machines | 49.824 |
| " Records | 111.974 |
| Disc Machines | 281 535 |
| " Records | 75 334 |
| | 518 667 |

Think it 547.917
Cylinder records 533000
Shipments all kinds 507953.
Sales Feby 357.145

Storage Bat.

| Orders | ship'd | assembled |
|---|---|---|
| 11364 | 14433 | 13482 |

Present Coffin with Phono

1 Week March average price
rec'd for record disc 69.9
Month of March — 59.
7 weeks to April 5 63.3

Theoretical amount of steam required for 84 persons 22 hours
35000 lt of steam
1363 lbs per hour
50 HP boiler Evap. 1500 per hour

Dead cost March 16 A4
without selling, interest, rent, adv'tg. or Experimental
7.14
Service 32
7.46 —
with selling 810

A6 10.61.

Feby 20 _ Costs given me

| | | |
|---|---|---|
| No 60 | loss | 11.81 |
| 80 | " | 12.00 |
| 150 | " | 150 |
| 200 | Profit | 14.15 |
| 250 | " | 26.00 |
| X | Loss | 1.12 now |
| VIII | Profit | 1.64 |
| V | Loss | 12.00 |

Wks cost 15% profit To worker

| Cost | without Wks profit | 40% gone |
|---|---|---|
| 60 | 27.15 | 38.01 |
| 80 | 33.15 | 46.41 |
| 150 | 48.34 | 67.68 |
| 200 | 54.22 | 75.90 |
| 250 | 62.28 | 87.19 |
| V | 32.74 | 52.08 |
| VIII | 13.12 | 18.36 |
| X | 11.97 | 16.75 — |

[53]

Test records Pierman made with glass funnels.

Test last 2 months anterior records for Things.

W Miller, get voice Trial
Marjorie Sullivan
Century Of Horse

Fig up Test Lots, Decals and place test everything + daily reports,

Wilson, shouldnt we so paying for our Disc Tunes as arranged some day the will Dub them,

W Miller. Why dont you work in Xylo in pieces also the Violin saving better trips regards after - Beat monday in crane hammer

Put blank on heated platten + hot roller under heavy pressure and roll them to size -

Experiment to get varnish lowest hardening point as to temp - + smallest contraction put a good man on it

Put good man regularly on improving grading powder in blank moulds

Put extra piece on Piano hammer

We should mix at least Ton of Penta get rid of variability

Wood pulp seems to dry to
Ever moulded even, think
should put on unaged
on moving procedure with
it lacquering on 1/2 of
1/2 wood, using resin
of phenol just same

Bee - Salesman provided with
Exide, Iron clad & our relation
to describe favorability of
rubber & fiber & mine company
out in. Exide - get acquaintance

Backman measuring pockets
Iron will get in & no way get
it out. Can't use magnet -

put man on Copping
Zinc's for Cu Balling
like Mineralizers, type
are Cast. also another
man & reusing CuO returned

Calliper comd records at Myers

| | | | | Of |
|---|---|---|---|---|
| 187 | 200 | 193 | 180 | .020 |
| 232 | 233 | 244 | 242 | 017 |
| 244 | 237 | 251 | 260 | 022 |
| 221 | 240 | 227 | 204 | 036 |
| 241 | 236 | 231 | 233 | 010 |
| 241 | 224 | 232 | 248 | 024 |
| 235 | 226 | 227 | 229 | 009 |
| 246 | 248 | 227 | 231 | 021 |
| 241 | 210 | 221 | 223 | 031 |
| 237 | 237 | 245 | 244 | 008 |
| 233 | 245 | 233 | 216 | 029 |
| 224 | 232 | 232 | 220 | 012 |
| 212 | 227 | 221 | 207 | 020 |
| 243 | 235 | 214 | 224 | 029 |
| 207 | 238 | 207 | 200 | 038 |
| 198 | 212 | 190 | 177 | 035 |
| 247 | 227 | 208 | 204 | 043 |
| 243 | 245 | 246 | 246 | 003 |
| 237 | 229 | 227 | 236 | 010 |

Thickest 260 thinest 177 083

from average of thickest
thinnest we have 53/1000
to true up mmm. Wheels

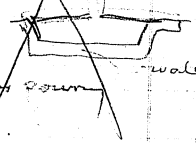
sea of Hydrocarbonate
will reduce Ni on surface
of particles, possibly
do away with flake
or load tubes & then
soak in hydrosulphide
several times —

Load blank mold, then put in
Rubber 1" thick pieces
Cold, then [illegible] Top
vehicle in Mold [illegible]
Receptus & then Mold
Reg — 900 [illegible]

For making subcyanide
flow Reg for on
Metal, Removable rim
Dont go above 160°
or there about [illegible]
only going to subtracting
Condensation & not to final

Keep in dried clean oven
Water Bath to hold 80. to 100
Print on this at very low
pressure. Think it will
profile OK — Can vary to
suit. Use Paralite to
insulate the metal in
plating — Think this will
Great Challenge

Dose volute blank.
Top screw (above) not
be used only bottom
& [illegible] Chelle



Press collodion Cold with
Para redder 1" thick
packed to get like
water & then turn
it bone & drip —

For Turning blanks
get big piece board
& turn ☐ 2
Edges right angles
of 1/16 to 1/8 across
for scraping in
Litho the blank
Wang say 20 thread
feed

get all the Overture
all Opera & every
other one
& select all possible
should have 50 —

grill for Disc only of folk
with Lines XX occasion on
or Ouv. & they 1st used on
Disc boxes — support
grill behind

Chalk Telfong may
act as a coatfiss
Dry it with Wesson
electrical — colors
Lay photo Soda & blog
Photo K 1

Spray Varnish on
wood Help like
Ford paint.

Walter Miller
Fahrenheit

Try single homogeneous wax with very thick legends as affixers -

Cabinet Turpinate use dose 1 minute & Cook at 1400 operary -

Treat 2 Cells with Hypo 48, wash out & treat weak acid 1% HCl 2% $H_2O_2$ & bail

Learning from graded work & Report

Walter Wellen

Willy Beyermeister get [illegible]

Burnetter in Cuba uses 500. conc 10 conc 40c Rhoyally

Pee - get over battery tested & accepted by Qoc Chris Engineers

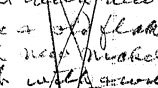
Instead 5% more channel make it 10% less

(57)

Ask for [illegible] a [illegible] at Chem Works –

Recognization –
Dry in vacuum
Make a solution
with [illegible]
both with [illegible]
over [illegible]
& various reactions

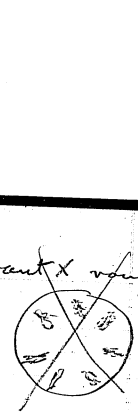
Take transfer paper
and [illegible] it



in [illegible] & [illegible] 1/2"
long then transfer
& Print on [illegible]
[illegible]

Prices

Want x roughness
thus



Even

Find a liquid Alcohol
Acetone etc that
Chloride [illegible] is insol
Chl iron is sol than
treat old [illegible] from
tubes

[illegible] of [illegible] & double
out with [illegible]
& [illegible] of [illegible]

also try Solve Barium [illegible]
Soln Ethylamine

Ni SO4 Insol Al or Ellis
Ferric SO4 Sol Al to great extent
Ferric SO4 is the only
known Sulphate Sol in alcohol
Solution must not be too
acid hence repeat was always
SO4 + Wet the dry Ni
probably just SO4 make alcohol

Sulphate Alumina insol
in Al. but is easy in
water. Ferric SO4 & Ellis
not sol water are
sol in alcohol

Solution flow up Crystals
to make basic insol
Ratio –

Pumpkins & Cocklock

Al SO4 + Wtty (Alums) Sol water
but pp on dilution

Sulphate Al & Ferric basic
Easily sol in cold dilute
SO4 difficult sol in
dil NO3 or HCl.

Sul Al + Soda very
sol K not very

Find put of solid
Ni sent over was
freed by KOH if
not free it

Try 2 or 3%
acetic to clean
~~green~~ old rust
Ni

Sydney
average 17.3 ft P per ft Reg

12400 ft Reg at London
gives 176000 ft sales of P.

Why change pipe ~~[illegible]~~

Put a profile on Pallidum
by Deport running in
a groove – or Reg –
or 1/16 of a profile 4
press it in –
or Roll a roller over
or

To our Optics for file in
Put off Rovine –

Moore in transferring
do. new watch lathes
clean out and keep
it too lb grease or dirt
it go down & then they
put it back after
they will get other

Wallace Miller & Co. Ally
on wax perpendicular
holding Reels up
by hour spring
or a a bell hanger
weight –

C21

for turning old Kodak into new
Mother says $94.98 per
1000 lbs Labor & chemicals
28 cents A 4 — no general
or specialist,

Found out who
maker porcelain cup
chief makes discs
Look under record
all of fine enough

~~Try~~

Hurd ~~double check~~
weighing of Wilkinson
for Varnish —

Overtime
pay also Drumbo
Rose Drumbo

~~Dolly Gray Dog~~
~~Wounds with very~~
~~fine Barbon colonel~~
~~Chocolate — dozen~~
~~Try —~~

~~Send I~~

In Victor Sent look
up my old application
on Disc Seconds
ago before I started
on new disc also
old Mylord patent
+ Searcher Astor Lib
+ German phonogram

Why Can't Cyclones
Record Output
100% days
only We have
Extra Capacity

Face Rocking Lawn
Mowers set up &
put to work

Fashions Clothes Cutters
We rent them -
Chain of stations -

See Hammacher about
New Gas Gas
Clockroot

Chickahoe Bronx
Property Move

Figure out from
down speaker + move
from 12 seconds
Cy 15 - 40 off to sale
Also Brigham old Customers
get list of sales last 8 yrs for
dealers
find out how much

LOH City The Mercurk
got our name

Take up W Jacob
Brigham Balcony
-
Consulting

Arranger for double
Checkers Huffman
&
Home again from a
foreign shore."
put on Disc -

Wandering Refugee,

Old Dog Tray -

Ask Smith for Iron
Ruin

Smith Dog an old 7s
~~Hope~~ take out dip in sing
Let water Boil
till Roff lifts out the
out where warm a
let it self heat -

G V Miller send up dog
5 gun Lyons I want
dip in Lyons auburn
get Pasoff - porcelain

Tell Hugh Hunt
order too many
Cellulose disc

Listen to melo wax
tracks Clark
Hasson has it

Get smooth surface
plates & then
make exposure
Develop slowly drop
& test Rodinol for
RO.

Try Diapelicular
with new lot old
with 6 p of boost
Acids etc

J V Miller 7 gram
Cukes [illegible] 7x
Reduced [illegible]

Make up 8 lbs
Reg Pi wet with
Conc Ehl Cobalt
Soaked 24 hours
+ Very little Tyco Cold

After Nach, toast dry
Test for 1/2 of RO
+ put up 2 A4
Cells for long
Enlargement

Put up 2 A4 for
long Enlargement
with Grous only
Crumples

Moore Flow 1/2"
blank 4.5 cc dry
at 120 for 15 hours
Then flow 2nd
Coat dry 24
hours

Walter Weller
World London gets a
voice trial for new
phonograph record at
Covent Garden
Norman Guilis
Crimmi —
in good hands
find what records
cost 6 or 10
company —

Send to Todd for
graphite with lamp
Lamnar —
Try Pea lamp
split Hemlock —

Bath Disadvas
Ammonia — used in
leathering — try old
N. Eng.

action of Sulphur
on Linseed Oil —
gives Resins try
Resins for Varnish
fillers & Wax
Secrets —
also 5 on other things

Lott

Lott

Patent 1,091,192

Tough Varnish
treat glycerin with
twice its wt of Succinic
at 220 Cent mix samples
on Cooling Not Sticky Tobacco
Mahogany after 15 hours at 85 Cent

(31)

Dry - Enough new Green
equal 10 Rong Cubes

1/10 % phos acid
1/5 %
1/2 %
1 %
+ none -

measure eq of
liquid water
just wet -

Patent new
Battery Crate

Make ball 3/4"
dia radius
Recorder to alap
Drag -

Note to Andersen
A Co sell battery + Vehicle
Complete for so much
money
The hand a guarantee to
buyer from ESBCo guaranteeing
battery for 4 yrs + also
a renewal of plates + supplies
+ Electrolyte guaranteed
for another 4 yrs. for
leaky cells + replacing
them over a period of
8 yrs — The whole cost
from date of purchase
of the Vehicle to end of
8 yrs shall not
Exceed ~~Sixty~~ dollars
per year - only Covers
845 Boston Chicago Phila St.
Landright Buffalo NY
Washington — G Jno
Cincin Pittsburgh Seattle

As menu
1 = 30 & 5 - 6 & 7 accordy
to Lang
~~at Alion~~

Babson buys
Oct 1913 to May 1, 1914
327,000 Amberol
at a total of 3.505 and
10% —

Bachman trade
300 monthly 505 packers
for Lyon —

Put thermometers on
ovens test accuracy
of the recording ~~thermo~~ items
used. The thermometers

Anderson Coupe  Silver Thread Tires

course level asphalt (Parkway) – W Collier Clear Dry

Temp 85 @ 90 Fahr  Weight Car w/ 2 persons 4000 lbs

54 A 6 2 cylinder  Open Valves 78 at start – Average in battery

at Start 216 – finish 160 –

| lbs sq in air pressure | Watts to motor | MPH | Volts | amp |
|---|---|---|---|---|
| 80 | 92 | 18.2 | 67.3 | 50 |
| 70 | 91.5 | 18.2 | 66.8 | 50 |
| 60 | 94.5 | 18 | 67.3 | 50.5 |
| 50 | 98 | 17.6 | 66.3 | 52 |
| 45 | 100.5 | 17.4 | 66.3 | 53 |
| 40 | 103 | 16.9 | 65.5 | 53.2 |

Great lot req in alone
another 24 lb 6% Sulphuric
first wet another 12
another 24% $H_2SO_4$
Work from day + save acid
+ send over to boxes &
get loading lots +
Compacting

Do wet test Slakes
Rubbing

Make test of powder
Keep above 170.

+ also lot below 130.
Make blanks + see
if Condensed or
non condensed is wanted

should not we
use thicker grinds
for 72 to stop
drop + spread

Simpson - filled
the air that goes
down 130° baking oven
+ chimney

| Powers – Labor | | Mechanical |
|---|---|---|
| Oct | 460 | 38 |
| Nov | 401 | 16 |
| Dec | 401 | 36 |
| Jan | 259 | 291 |
| Feby | 846 | 808 |
| March | 909 | 13 |

Treat some residue with Sulphurous acid

Smith Hall Fe
that wont come up
but only Aluminum
Wanted trial 6%
$SO_3$

Get some Red Fe from
Silver Lake try
reducing on it,
Hydrosulphite,
K sulphite Eld in
$H_2O$ & also NaOH,

Make Formaldehyde
Salt of organic alkali
not volatile like
NH4

Ford chassis to carry Electric
lot no passenger 2275

Normal lot with Eng 1750
Weight Eng 475
1275
52A4 - (14.5 lb) 750
Motor 4 gear 250
Make 53 miles 2275
around town

Walker Mellor Glover of
blanks don't break
Dunwoody Glide just as
of Moore & Crocker
deal with

Lubr Neoke 1 doz 1/4
Break Germain Silver plates
Dead float to flow &
deal with non tracked
blank Moulds

Schedule total to be compared
now till April 1 1949

| | | |
|---|---|---|
| 250 | 9828 | 982800 |
| 200 | 8227 | 657600 |
| 150 | 11428 | 834000 |
| | | $2,473,800 |

Moore-Harris Ennis
point on New blanks
4 months than &
handle carefully
for the 13 test points

Moore we will make
a test powder schedule
to Condense in Vacu
Chamber —

400 - Cracked record
+ note all comparisons

June 10 Notes

| | |
|---|---|
| Originally | 255000 |
| Reduced | 107000 |
| Outstanding | 148000 |
| Dec in July | 48000 |
| Aug | 45000 |
| Sept | 25000 |
| Oct | 30000 |
| | 148000 |

Make enough Var to flow 1680 Plates, with 10% more 6/4 see of Cont stop bfoters

We once made double transfer OK now they look something Changed my Varnish —

Dally = Make some mix's with Reg powder of Chalk to Limit detto, clay, heat before hand —

Smith acid over the old Ni tubes & will wake

Lott, remove the Hypo Ni & will separate the flake —

Put up 6 tubes new Ni old flake & run for Endurance — detto 2 A4 for Long endurance

Treat Reg 7/8 Mix with Sulphuric Acid & have Miller make 4 tool Irons set of better than Reg

Moore, about ~~[illegible]~~ Cracked discs and 2 quits –

Christenson to make a 651 Wax disc soon as possible – Or couple Cylinders for Waller Miller to test with –

Try Experiment with a reproducer having a ball (Sapphire) Exact dia of the knife to run over a wax cylinder record to see if we can smooth down chatter marks on Req + 651 wax –

Investigate the Record that Eleven of the other 10 Cracked – This is 20% of all pressed – it may look as we get 20% of prints made cracked

Hurry Duluth on those 72 plates I want to treat with sulphurous acid –

To get 15000 daily

| | |
|---|---|
| 90% blanks required | 130000 |
| Transfer plates | 45000 |
| Transfer gyrd | 25000 |
| print 85 | 21000 |
| total 77 | 15000 |

Find from Moore how many presses we have in Each Dept, for not 15000

Want 42 Blank
43 Transfer
40 print.

Then see Shriver for long Credit on a Contract for more presses —

Also look up other devices for increased output.

Now here
21 Transfer
14 Print #4 flow
18 " #2 "
27 powder 4 Coming
5 here to make 32 blank
Wants 10 more presses for for Transfer & print —

Daily flowplates

1 = Atomizer = Spray & blow - Keep blowing then spray & blow, say 4 to 6 Layers - Can do this by Washing

2 = Put plates 1/16 or less apart

3 = Steel plates -

4 = Feed Oth machine feed Van by screw feed Conveyor or Conveyor in so same surface velocity

5 = Van very thick dump in center & spread with spreader like bank loading powder

6 = flow set on fire burn off Alcohol

Daily

7= Ask Juva if can make Condensite plates, or use direct or plate oven -

8= question, Naptha Benzum or surface -

9= Mix water with Normal Cell its a white precipitate then flow on spread -

10= Possibly with water to precipitate could get stiff dough & sheet it, using minimum Alcohol

11= Mightgrind 6/4 Resin & para with water & form a dough possibly wet with Alcohol & roll or sheet Vary

Chrudemann burning the 2 cylinder records 651 for Walter Miller -

Smith - try forming at different Charge rates 2 cells each A4

Chg normal -

| | |
|---|---|
| 1/2 normal | 3 Run |
| 1/4 " | |
| 1 1/2 " | note view particularly |
| 2 " | |
| 3 " | |

all dough normal

Also small Cell | Fs 4 24

| | |
|---|---|
| 1/8 normal | |
| 1/4 " | |
| 1/2 " | Test for Fs |
| Normal | |
| 2 " | |
| 4 " | |

Sulphonated oils for
Mixing with varnish
Red oil – Castor 100 pts 30
$H_2SO_4$ –

Powder up some old Fer
reduce with Tin chloride
dilute red iron

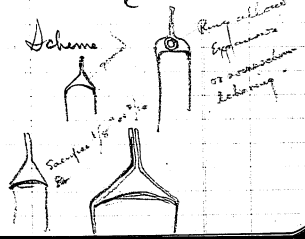
Loading 4 units
& Sets Loading Finish
unit –

Disco – put other
units up at
times –

Scraper – 12 years
mounted Cast
iron base –
~~& shelling plate from~~
~~Pinch~~

Bachman cutter coating
hydrate core iron oxide
etc Lacy –

Scheme



Bachman - Check test for
Moulding M.O.H. before using
Loc 212 - Falls

Moore - What breaks
of Moulds etc for
getting out 12"
Rod [illegible]

Test Lomparts on
Blanks by [illegible] on
surface plate -

Letter to R Spiers
saying that they should
test Spiers and
[illegible] the group
defendants [illegible]
to return to the
well and another
to replace it

Learning a Metal
Network with Cellulose
in Corro near gate
Everything OK Burned

Get daily payroll on
Phone not disc -

Q.W.M - Sums of $SO_3$ from
12 pts powdered Mortar
100 2 Mortar 1.50,
2 1.80 -

Get ready Monday on
the 200 Lot 874 Lobed
[illegible] OK Transfer

Hayes about the bad speaker

Finish up fall dress —
Clean it up —

Hear all the Overtures,

Find out, that to Cremup
only 9 days off —

Form non smooth receptable head
in place — Papers over perforations
To hold in place while gets
solid —

Ascertain if $H_2O_2$ is formed in
battery

Alarm — 2/ 1st
Close mag Osc
England gave
Overturned —

Write Weller — Write Hayes
London if there can't a
Vaudville singer that
is an imitation of Harry
Lauder with the same
type of voice —
Also get trial of some
of Lauder songs —

Press cell full with Rubber
+ turn true —

Get Improved Piping Play all
the Overtures —

Try Chalk Telephone as
Rectifier —

Cabinet Amb X 1/4 Trick
Load with Rubber — get side
+ make mould —

$NH_4Cl$ forms a double salt with $Al_2O_3$ in small vol of water on long ads mi with them

$Al_2O_3$ Sol in $Ba(OH)_2$, to med intensity also in Ethylamine

Asst° of U Miller stand up 1 oz 5 grain Reg Tr. want to dig in meal and take $BaSO_4$ - $SrSO_4$

Patent Steel tailing Crate when ready

Bachmann ~~should not use~~ use thicker grids for Fe.

| | Labor | unaccounted |
|---|---|---|
| Powers Oct | 460 | 39 |
| Nov | 401 | 16 |
| Dec | 401 | 36 |
| Jany | 259 | 291 |
| Feby | 846 | 804 |
| March | 509 | 13 |

June 10 Notes

| | |
|---|---|
| Original ally | 255 000 |
| Reduced | 107 000 |
| Butcherally | 148 000 |
| Ship in July | 48 000 |
| Aug | 45 000 |
| Sept | 25 000 |
| Oct | 30 000 |

We once made double transfers now we want additional. Cooking something changed in Vermicelli Tea Pana. — perhaps 6/4 dry by noon.

Put up 4 tubs new 24 old flake grain hot long endurance

Presses on hand
21 Transfer
14 Print 4 floor
18 " 2 "
27 Powder 5 more coming

Sulphonated Oils to mix with Var Turkey Red oil
Castor 100 gls 30 [illegible] 2504
Sulphonated

Moore — what became of 12" press & collulose wrinkles ordered some time ago

Maxwell about letter to Drake about weather. get Copy

Get daily payroll on phone Wrpt next occurred

Q V M — down oil sendaroma old 7½ to QVM to powder throw 100 150 + 180 10% new & 7 grm pkts.

Always about Unit Cos
[illegible] —

CCIT

Mr Clemens Drugstore sold
28 bottles in two months
not possible that nothing
do give out

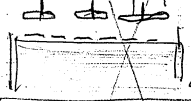


Think powder is too fine
or varies ~~and~~ think whole
trouble is too much gas
in Vanes from lack of 6/4
or too much free phenol
+ that lines must be
corrected on plank moulds
more porous by less
pressure or coarser powder
or more compound

Look out for fine powder

pick out 300 or 400
plates flat + not
concave rather more
convex + slow bake &
transfer +

Ask Dalley how bubbles
are on brown plates +




Big suction fan to
take out ,

get pay roll Dec
Dept +

Wilson Leaving ~~[illegible]~~
down on Amb

Make up a schedule
on Amber glass
now — +$80

Trick Ball games
Movies —

To the Mayed Vaults
Certainly fine proof
Masters & 2nd Masters
& Wax Mysteries inspect

Treat old Mi with Wdf
also Wdy & NHy SO4
also — Ether — Alcohol
Benzine

Enter in book "Disc"
Blank
1000 prem good average
900 " " good
600 " " poor near unpaid
Meet sheets 1000 —

Expert New Navy
making double Crucibles
to test Gilley

Make an A H with 1 M plate
2 rows + balance blank
sheets to get results of
Cup & Vallope —

Also 1 with paper wrapper
around M & Fe Element

Hoffman Make several hundred blanks, 10% more 6/4

Another lot 18 7ozs Phenol mixed of 3 sq amount of 22 –

Person 7z Mix from Ammonium Sulphate powder blank mixed To 2 Lbs & repowder & test in small tubes & if OK in A4 (2)

See Buchanan about Libria

Bring up 125/842 blanks 1/2 hour at 3.40 take Ulcer transfer

Bonci must put out 10 times yearly 15000 guaranteed

Old tubes dipped in Conc Coll + wrapped in A4

Try put in Disc for trial in good Movie Entertainment for Evan Valley mixed & test vale –

Ask Lott look up her book on Dist of Ag in Pot with def Cream

Chocolington Make Lot Clear ale Zinc or then add Clearic up to Limit Chall

Put under Refrigerator
Shaving takes off edges,
London a from milk
30 milch cows
Cessii -

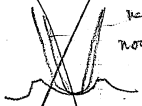
Following K Salts insoluble
little Insol in Water
Perbromate
Perchlorate
Pertungstate
Phosphate
Sulphamide
Piperate
Pyrosulphate
Silicofluoride
Urate
Lithia Salts
Borate
Fluoride
Phosphate

2 Cells each 4 grms
Each cell —

Arrange with Lubr. for Cases, old master moulds in Fa 60 x to store

Shrive Flex Steam pipes - Cant use pressure need bad

Improve Auberal Pipdors




Some radius at bottom but take sides off

Learning about Dr
for Exam Credentials
Like Bicelmann

Get 1/2 doz more feathers dusters
test one on a discard mould
in holder 10 to 20 000
times, make moulds & brush

See German Collodion
maker when he comes

Find out what blocks
Copper-Moulds,

Fix Alcohol for SO2
for Wet & Sulphuric
dry + Weller Make
in pockets,

Dry out 5 Fe old plates
+ Re coat but soak in
H SO2 6% - drainage Fe Co
Zero,

Ask Weller what Number
of the H SO3 bottled old Fe
ground 100 170 or 190
Mesh -

Fe burrs ground off
Fe stock pockets

Send that 1/2 doz Gallery
irons soldered new edges
Cramps for tent weight
before cramping -

Haven about Band
test Cylder Dia after
backed off & dressed

[71]

| | | | List |
|---|---|---|---|
| Amberola | 10 | 30 | B.99 No 1 |
| " | 8 | 45 | Closeto No 3 |
| | 6 | 60 | No 2 |
| | 5 | 80 | Best No 3 |
| | 3 | 125 | use Desc Cabinet |
| | 1 | 200 | |

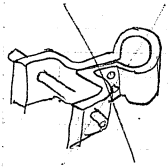
Find out total pay roll & Expenses of HPK & Sales & Sales force & Exchg System & see how much losing

Learning. Why not have Expert of Air Flow Vacuum Co come over & show us or Take Cabinet there as our men may be agent of a queer it

Paint Air X Aluminum Vac let me see it

| | | | |
|---|---|---|---|
| Amberola | Best seller | X | 30.00 |
| | Next | 6 | 60.00 |
| | " | 5 | 80.00 |
| | " | 8 | 45.00 |
| Poor sellers use desc'cabinet | | 3 | 125.00 |
| | | 1 | 200.00 |

Find out Co = smooth pressed + then die
Center not round



Tried ctl. on plaster Paris with wood fibre or Cabulpw dried & dipped Reg record Vari pieces. — ditto wood pulp Cylinder dip bakes. ditto paper record dip dry threw dip Vari bakes pressure paper heated before dip — long fibre paper

See Cost John Hours Oregon — Face what 1/2 the Cost would do in Advertising —

ditto phone

Try colloidal pigment Colors impregnate in Drac Varnish & for Conductive Cements —

Buy fat alb $SO_2$ 7½ YUM make up 2 pkg 100 2 of 150 + 2 of 150 needed

Melvin Maxwell How about getting our Traveller E Mead Roop on here to Talk sense — We also want more information than we get

Chemist in Chem Lab test our iron for Vanadium — important

Pick out that records to be sent by Tonei

Cheaper cost of equipment & improve it

Baldwin – Salary of Records.

| | | | | |
|---|---|---|---|---|
| Sumpter | Hand 3.10 Mach 3.47 | Job 20415 | Obr 2075 | |
| Powers | Hand 260 | – 20415 | 2145 | |
| Edison | 250 | 40% | 25.10 | |

We have 374 Baths Outside of Dining Room

3½ days ~~[illegible]~~ 125 daily

Meister – Letrup look at Lab note book (Rent over by Smith there is 3 or 4 Yr) books missing –

Backman – Have you samples of numbers Lamp full line for Easy other purposes –

Get HPK data from Pharopane –

Newman to use factory iron & deport on a Ni strip with & with hight & run down deposits

Buckling
Circular Trays
or change C.D. to
Buttyn Trays

2 short tubes
2 flake 15 green.

Putting out away
from D.L.H., also
travellers

Good all - giving
free camp - to dep
# A4 plates in
Sat Conc Ni Chl -

See if we can arrange
with the big Pfenning Dunsen
pick there & try to
get more information what
we can do with them - & what
they publish & keep -

Arrange with Mr
English Bullemaker do
put somebody on
Expert to use Roper
& Coventry Van for
Cheap Cylinder
reading - or mandrel
& Seamless, or Collapsible
mandrel -
Sb Cl Tri Cl, in Varnish
always final hardening
Very Neatness & Tough Thin Cylinders

Ferric Chloride acts like Resorcine. Transformer will come off easy

Is it worth factoring on D L & W

Does he give them transfer?

Arrange to send around, Mr Gulley last of August

1/2 doz men was same act & look like Hutchs —

Test balling Crate.

Smith Rich Cobalt

Call 20 times then

Rig up to run

10 times narrow out

120 Fahr —

Send, when you have received 2000 lot moulds

rent free no —

See what selling plumber have on hand Kenefick

Smith put up 4 Reg 7z.
& 4 7A 50y 7z –
Run Reg. Cutting 1st Run
take one & cut off
look out, 3 more
runs another 10 Runs
another 10 Cold 10
Not the Cast Cut
open & note Changes

Pick out for Weller Weller
3 Songs Each for Burton
Bass & Tenor as test
records – Ditto Cornwall,
Mezzo & High Soprano
Colorature – Ditto
Cello Violin –

Slogan – Wahack Well
voice and instrumental
Portrait, not color

Try Light in
Adelaide

Are our vibrators with
test tubes run previous
to use with Ni

Hoffman – off Saturday
Also why not till last
minute orders a stiff,

Prima why do
records come up by
Spirals – throwing repair
Dept out of Keller

Smith = We must be
wrong Moore than 2
grade LIOR 175cc in
Schwill Cycl Calls -

Mallory - Bacon Talk
about Kaffer - also about
another chemist proportions

Rentals in Goldhills in
the Season

Walker Miller -
Long Tresch
Oncle Xylophone
3 album as Pace

Fig out machine date
Force use 7 of them
1 for repair 1 for
Miller -

Moore about shaftless
plates - Very bad now
~~Sat dyes I can't get~~
~~up the colors~~ -

See best selling Disc
What is necessary to get
records to stock up -
Hawaiians Etc -

$SbOH$ ~~used in NaOH~~
but salts in KOH, try $SbOH$.
as Sb in NaOH.
Na Metal antimonate is the only insol salt of Sodium ??

Amido Benzine Sol Water
Strongly Alkaline —
use of Crystals or
Lump is better —

When 2 molecules of
Boron Trioxide + 3 Molecules
Lead Oxide mixed together
Yellow solid fuse is made
which solidifies in Hot Oil
good for sub master of
Lead —

Pb Cy insol in KCy
try battery Lead plates
in KCy

Hydrous
Cupric Oxychloride
is insol in KOH, try
as substitute for CuO I
Iolande —

Hydrous
try Cupric Acetoglycide
in Iolande —

Hydrous
Manganate of Barium
in place CuO in Iolande

Sb precips by Zn gives black
powder of Metallic Sb insol
in aqua, steel appearance to
Sb master Zinc articles
Immersion Coat Zinc

Smith set up 2 each long tubes of various Ni numbers for 3 Gal 10 Hot & 50 Hot

F. F. Miller why are your Ni Off running so high on 10 Hot?

What is done with old wax master wax

Man (general) to save money in plant

Smith 2 A4 all xplet tubes long endurance

2 A4 - with NaOH Cl xplet on 50 - put up Long Endurance

Lumping - Quench mag

Positive under hydraulic -

Try in NaOH Calcinate Borates Aluminate & Phosphate to dissolve more Zinc

Get list of all outside payroll Benefit Vacation etc & Incorp etc

Flatley Not spongy

1 = Note if flake sponge
if smooth to stay colly
tube swells - if dent up
desired shape -

2 Making tube, shrinkage
to Limit + Cracks -

3 Chloride or too much Lithium
in small cell + tubes

4 - perf too big qel from cell
Cells + Compared =

5 see if seq leak made on
Cut open tubes, How many dirty

6 = see temp little cells if
thermoundi OK -

7 see if AMT Yellow
standard (px)

8 = see if Benzine clean

9 = see old temp rod
if worn

10 = See if mercury leading
tubes being loaded cant
worn lapper -

11 Jump rod worn small

12 = Run test 6 Cells 3 def nickel
132 Or Reg - 6 150
6 . 175 - to qel quick
results mercurial qel
quick test, 6 with Cobalt in

13 Are pen operators treated
Hypochlorite - Has size
changed -

14 = Ask Smith if he proposes to reassemble the ~~tank~~ A4 batteries run 7 years he found sediment 6 ft in —

15 Get analysis of the sediment of the above

16 - Get analysis of the electrolyte used in small lead cells —

17 - See if Smith is running off the previous to assembling the little cells —

18 Test the specific gravity of nickel plating out Albany

19 Compare burns + hale old with new cells —

20 = See how they match a set of batteries —

21 = Ask Smith what becomes of Chromium lead cells get now from Crook —

22 = Analyze the washed grain they use —

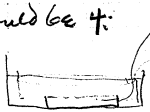
23 - Christenson come over see if Right account 1.00 put in

24 If rubber rough it won't move on each other + Mr. Smith - file out contact with tubes

25 Take old tube gauge how much drop of split see how contacts test on machine

26 – Rupert Gallery – see
Run sheet – also was run
here 2 or 3 times & see
what was done.

Average flake per dump
July 1913 370 –
" 1914 373 –
Should be 4.



7½ pkt
oven – chg & see 6
hardness –

Draw up detail test
room 300 Cells

Put up 2 Aig. with 50 cc
Tin dissolved in Electrolyte

Look up effect of Chromium
on new in place of old
4 gr Ni – if new not
what bad cells due
to Stone, Lithia Combustion

See what was pay dumpline
Diamond Mont

See if a Transfer
Can be sent in
Shape –

C95

Moore
How many plates straighted per day.

J V M. Make 10% or 7½
35% Tin in 7½ &
make up 2 A 4s

Put the old 4 yr Ni Tube
dipped in Ni & Co Chloride
on 5 Hot runs & then
run Cold —

Tell J V M that any acid
Contain in the Ni Off ~~salts~~
will make it run Low
$NiCO_3$ etc

J V M a little Nitric
in your $H_2SO_4$
on Red iron will
Remove Sulphide Hot.

Make 2 pockets Fe alone
with 5% Hcl — run on 7s

Get Grother bath on 7s

Smith Put Cobalt Cells
on 130 Hot, 10 Runs —

Fred Oil press
wax (white) in
press 4" die hard
as possible —

10 000 good records day

80% good to ship -

| | |
|---|---|
| 10 000 blank Veneer | 725 00 |
| 15 white wax | 18 45 |
| 15 Master Moulds | 18 15 |
| 30 2nd Master Moulds | 36 30 |
| 80 Wtg Moulds | 96 80 |
| 5 Master Labels | 23 75 |
| 80 Sub " | 22 40 |
| Grunel supplies | 50 00 |
| | 990 00 |
| Payroll | 1437 00 |
| General for Disc dep | 516 00 |
| Talent | 250 00 |
| | 3193 00 |
| 40% General plant | 1277 00 |
| | 4470 00 |
| 20% selling | 894 00 |
| | $ 5364 00 |

10000 daily
5364

If 75% good for labor
Record would be 37 cents.

Amen Ex

no meet kept of Current
used to break Low cells

Ferguson only Expert
Employed — rest are
helpers $55. month

find out how many

Amen Exp

~~Low~~ cells equalized once month
Low cells Cut out & bat up to
Capacity of generally
Never replace individual cell
always make replacements as a
whole
Low cells Caused mainly by
Cracked jars or foreign matter
gathering in cells
Mainly Salt
Use Tap water
Flush once week —
Decay due to positive material
falling out of plates
Amp Eff generally
85% lead 1% Current for
Equalizing once month

American Exp Co

42 Cells MY 13
Rated Cap — 189 amp hours new
Actual " 202 "
" " 15 months 157 "
30 " 100 "
Average Car Miles day 30
Average Amp H " 135
Amp h per mile 4½

Replacements made at 53% of rated Cap age 30 months
100% of required average mileage obtained to 71% of rated amp hour Cap capacity

Cost KW 3 c
may life would exp 30 months
average life 15 months
17 cell Repair Cost 1584
13 " 1008
no labor in this, just Cost Rep.

Curve shows —
Straight line from
from 202 To 100
amp — reaching
100 amp in 30 months

Capacity falls
3.4 amp per month

Have 18 — # 7000 GV-44 17 MYIC
106 # 4000 Baker 42MIB
6 # 4000 Baker 60-A8 Ex

Replacements made at end 30 months
av mileage life of battery 25000
guaranteed cycles 600
Cost 44 — 17 plate $600
42 13 " 450
Broken jars average 25% 4 year
17 plate jar 1.25 13 1.00

General Motors Co mailed order to us for Brooklyn by mistake

Price - 44 13 plate MV
4 Storage 9 Cellar Floor
8 cells or one & Cart.

$505. Net 30 days

St Paul Bread Co
Quoted 42 g. MV 405

30/-18 4 yrs

| | Month | Year |
|---|---|---|
| A8 21600 watts | 23, 54 | 282 |
| MV21 21736 " | 33. 35 | 400 |
| Phila 21164 | 25 28, | 303 |
| 8 | | |
| MV21 | 30, 30 | 363 |
| EA8 1/2 list | 19 89 | 238 |
| " 20% increased - | 18 27 | 219 |
| + allowance for battery - - - - - | | 198 |
| Phila - 6 Phonovacs | 23 52 | 282 |

C105

60 cells 30% off 80% prorating

| Edison | watts | Price | | watts | Price |
|---|---|---|---|---|---|
| A 4 | 10800 | 567 | MV 11 | 10868 | 496 |
| A 5 | 13500 | 709 | " 13 | 13068 | 576 |
| A 6 | 16200 | 840 | 15 | 15224 | 657 |
| A 8 | 21600 | 1130 | 21 | 21736 | 949 |
| A 10 | 27000 | 1400 | | | |
| A 12 | 32400 | 1680 | | | |

4 yr period

MV11 yearly Cost 216 75
A4 141 75

8 year period

MV11 201
A4- 121.50

Phila - 21164 watts @ 398
Revenue 810
788 guaranteed 28
25 28 month, month
Revenue 3 400

Revenue 44

345 ok
397
453 opt Grove Bee
654

4 year period

Cost Ironclad 841 MV11
" Edison 567

Cost Ironclad 973 MV13
" Edison 709

Cost Ironclad 1119 MV15
" Edison 840

Cost Ironclad 1603 MV21
" Edison 1130

No Jars

## Electric Storage Battery Company.

Prices F.O.B. Chicago - Walker Vehicle Co.

| No. and Type | Amps. Dischg. | Watt Hours Cell | Watt Hours Battery | Weight of cell. | No. of Trays Battery | Price | Remarks |
|---|---|---|---|---|---|---|---|
| Ironclad - 1.96 Volts average - 3¼ in. Ribs - 4½ hours Discharge | | | | | | | |
| 42 MV 9 | 28 | 247 | 10.374 | 29½ | 1229 | $395.15 | 3.18 c watt hour |
| 42 MV 11 | 35 | 309 | 12.978 | 35½ | 1491 | 473.90 | 3.64 |
| 42 MV 13 | 42 | 370 | 15.255 | 42 | 1764 | 550.80 | 3.53 ours 5.7% |
| 42 MV 15 | 49 | 432 | 18.152 | 49 | 2058 | 638.00 | 3.45 |
| 42 MV 17 | 56 | 494 | 20.745 | 55½ | 2331 | 742.70 | 3.57 |
| 42 MV 19 | 63 | 556 | 23.338 | 61¾ | 2594 | 822.50 | 3.95 |
| 42 MV 21 | 70 | 617 | 25.914 | 68 | 2856 | 905.90 | 3.50 |
| Hycap - 1.98 Volts average - 3¼ in. Ribs - 5 Hour discharge | | | | | | | |
| 42 MV 11 | 27½ | 272 | 11.424 | 31 | 1302 | $301.25 | 2.64 American Exp |
| 42 MV 13 | 33 | 327 | 13.734 | 36½ | 1523 | 343.75 | 2.50 |
| 42 MV 15 | 38½ | 381 | 16.002 | 42 | 1764 | 385.25 | 2.40 MV 13 450 |
| 42 MV 17 | 44 | 436 | 18.312 | 47½ | 1995 | 433.70 | 2.37 MV 17 608 |
| 42 MV 19 | 49½ | 490 | 20.580 | 53 | 2226 | 476.35 | 2.31 |
| 44 MV 21 | 55 | 545 | 23.980 | 58½ | 2574 | 548.50 | 2.29 Lowest yet |
| 44 MV 23 | 60½ | 599 | 26.356 | 64 | 2816 | 593.15 | |
| 44 MV 29 | *(77) | *(762) | *(33.528) | *(80) | *(3.520) | 761.00 | * Estimated |

## Prices F.O.B. New York to Rauch & Lang

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 41 MV 9 | 28 | 247 | 10.127 | 29½ | 1210 | 384.00 | Ironclad |

## Prices to General Motors Truck Co.

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 44 MV 19 | 63 | 556 | 24.464 | 61½ | 2583 | 850.00 | Ironclad. |

Battery Prices to Vehicle Manufacturers - New York Central Jasciabs
Ironclad Exide. Average voltage 1.96 - 4 1/2 hours discharge

| No. and Type | Amps disch. | Watt hours cell | Watt hours battery | Weight cell | Wt. of trays battery | Price | Remarks |
|---|---|---|---|---|---|---|---|
| **Walker Vehicle Co.** | | | | | | | |
| 48 MV.9 | 28 | 247 | 11.856 | 29 1/4 | 1404 | $437.00 | f.o.b. factory - $492 resale. Renewal battery 29 1/4 new cells original 33 |
| " Allowance when replaced by new | | | | | battery | 75.84 " | " |
| " Positive and Negative renewal | | | | | | 387.50 " | " |
| 44 MV 11 | 35 | 309 | 13.596 | 35 1/2 | 1562 | 485.00 " | " $546 resale |
| " Allowance when replaced by new | | | | | battery | 90.64 " | " |
| " Positive and Negative renewal | | | | | | 435.14 " | " |
| **J. C. Bartlett** | | | | | | | |
| 42 MV 11 | 35 | 309 | 12.978 | 35 1/2 | 1491 | 580.00 | * Estimated |
| **Philadelphia Storage Battery Company** | | | | | | | |
| Average Voltage 1.98 | | | | | 5 Hours discharge | | |
| **J. C. Bartlett** | | | | | | | |
| 42 WT 19 | 48.6 | 481 | 20.202 | 41 1/2 | 17.430 | 380.00 | Cost business since 1909 $1.15 |
| " 28 months guarantee one renewal | | | | | of | 300.00 | Pd. at original purchase |
| **United States Light & Heating Company** | | | | | | | |
| Average voltage 1.98 | | | | | 4 Hours discharge | | |
| **Walker Vehicle Co.** | | | | | | | |
| 48 WBT 11 | 125 | 248 | 11.904 | 26 1/2 | 1260 | 799.00 | f.o.b. N.Y. - 4 yr. maintenance |
| 44 WBT 13 | 150 | 297 | 13.068 | 30 3/4 | 1353 | 879.00 | " " " " " |

C1117

Cost of Blank - materials only

| | |
|---|---|
| 100% good | 3.54 |
| 98 " | 3.61 |
| 96 | 3.68 |
| 94 | 3.76 |
| 92 | 3.84 |
| 90 | 3.93 |

Cost of Transfer veneer no labor

| | |
|---|---|
| 100% good | 5.80 |
| 98 | 5.92 |
| 96 | 6.04 |
| 94 | 6.16 |
| 92 | 6.30 |
| 90 | 6.44 |
| 88 | 6.59 |
| 86 | 6.74 |
| 84 | 6.90 |
| 82 | 7.07 |
| 80 | 7.25 |
| 78 | 7.43 |

Transfer continued

| | |
|---|---|
| 76 | 7.63 |
| 74 | 7.83 |
| 72 | 8.05 |
| 70 | 8.28 |
| 68 | 8.53 |
| 66 | 8.78 |
| 64 | 9.06 |
| 62 | 9.35 |
| 60 | 9.66 |
| 58 | 10.00 |
| 56 | 10.30 |
| 54 | |
| 52 | |
| 50 | |
| 48 | |
| 46 | |
| 44 | |
| 42 | |
| 40 | |
| 38 | |

Cost of Print + 1est. moulds -

| | |
|---|---|
| 100% | 6.80 |
| 98 | 6.94 |
| 96 | 7.08 |
| 94 | 7.23 |
| 92 | 7.40 |
| 90 | 7.55 |
| 88 | 7.72 |
| 86 | 7.90 |
| 84 | 8.09 |
| 82 | 8.29 |
| 80 | 8.50 |
| 78 | 8.72 |
| 76 | 8.94 |
| 74 | 9.19 |
| 72 | 9.44 |
| 70 | 9.61 |
| 68 | 10.00 |
| 66 | 10.30 |
| 64 | 10.62 |
| 62 | 10.96 |
| 60 | 11.33 |
| 58 | 11.72 |
| 56 | 12.14 |
| 54 | 12.59 |
| 52 | 13.07 |
| 50 | 13.60 |
| 48 | 14.16 |
| 46 | 14.78 |
| 44 | 15.45 |
| 42 | 16.18 |
| 40 | 17.00 |
| 38 | |
| 36 | |
| 34 | |
| 32 | |
| 30 | |

Direct Material Costs fundamental Unit

| | | |
|---|---|---|
| Powder blanks | .0354 | per dine |
| Varnish | .0218 | " |
| Transfer Complete | .058 | |
| 8 Submaster Blank | 20. | |
| 2nd Master | 20 | |
| Celluloid Covering | 3512 | per blank |
| Sub + 2nd M Blank Celluloid | 5512 | |
| Wax Blank for mixing | 1.23 | each |
| Mear Mould | 121 | |
| Wking " | 1.21 | |
| 2nd Master " | 121 | |
| Label, blank + paper | .0225 | |
| Master Label Electro | 4.75 | |
| Submaster Label Cut in | 028 | |
| Genl Exp 6 mo, Month | $6981 | |
| Wkg M 150532 prints 900 moulds | | |
| 28 days March | .747 cents | |

Metal Tray 30 lumps 10 lbs 12 3/4 oz

New hypotray bullion susp. 6 lbs 1 oz

100 Cells -

Renewal 4 yr cells

| | | |
|---|---|---|
| Grinding | 3 | 74 |
| 10% loss rubber pts | 7 | 54 |
| 12000 Tubes only | 59 | 99 |
| 20% loss Cans | 2 | 64 |
| Labor assembling Ni | 1 | 96 |
| Recovering Ni + flake 2½ c lb | 6 | 10 |
| 12000 Fe pockets | 16 | 87 |
| Assembling Fe | 3 | 25 |
| Addition Fe mix | 19 | 07 |
| Recovering Fe 2½ c lb | 5 | 27 |
| Assembling Cells | 8 | 09 |
| Electrolyte | 29 | 00 |
| Doping + forming | 14 | 00 |
| | 177.52 | |

2nd charge formation

15% more flake New [illegible] 26

per 6 cell cost Fe 205.52

2.22 Cell

Millers estimate converting old 4 yr NiOH to new NiOH

Material 08494 Cents lb

Labor 01604 lb -

9.498 Cents lb

27.069 Cents per cell -

Calliper Records sent by Moore to the
def one edge against the other

.004
.014
.009
.007
.015
.003
.033
.018
.003
.014
.010
.019

April 13 -
Class A Dealers 73 - dice
Dice jobbers 44 -

Big Ado over whale Co
Coal to April 14

$ 23,121 16/00

Of which N Y City
$ 10,235 85

Always keep free
Shares 22 1/2 in Vault
New lot Invented
Now 24 1/2 % —

[125]

Horn Notes

| Sec | Mach | |
|---|---|---|
| 64 | — | 15.6 |
| 128 | .5 | 7.8 |
| C 256 | | 3.9 |
| C 512 | | 22½ Mechan |
| C 1024 | | 11.25 |
| C 2048 | | 5.62 |
| C 4096 | — | 2.81 |
| C 8192 | — | 1.40 |

Jany 29th

| | |
|---|---|
| Records in Catalogue Wrap | 389 |
| New Supplement | 24 |
| Next list | 42 |
| " Single | 14 |
| Nat matched | 8 |

477 — 245 Discs

Sales records discs all prices
4 week Ending April 15

| | | | |
|---|---|---|---|
| 173014 — | | 6836 | 2.50 |
| | | 2874 | 3.00 |
| 111061 | $1 | | |
| 43806 | 1.50 | | |
| 8438 | 2.00 | | |

| | % |
|---|---|
| $1 | .64 |
| 1.50 | .25 |
| 200 | 4.8 |
| 250 | 3.9 |
| 300 | 1.6 — |

Total list price $219357
$1.267 per record

50% off 63.3 —

Talent on Disco-

| Daily | Cents |
|---|---|
| 1000 | 24 |
| 1500 | 16 |
| 2000 | 12 |
| 3000 | 8 |
| 4000 | 6 |
| 5000 | 4.86 |
| 6000 | 4 |
| 7000 | 3.47 |
| 8000 | 3. |
| 9000 | 2.70 |
| 10000 | 2.40 |

Resin 845 lbs

| | |
|---|---|
| Phenol 7 1/4c 1000 lbs | 72 50 |
| 600 lbs 8 1/2c formol. | 51 00 |
| 12 hours labor 20c | 2 40 |
| | 125-90 |

14.4 Cents pound

Jungs on hand Dec 5 1913

| | | |
|---|---|---|
| good, not recorded | 68 | unstrunled |
| " " | 94 | Sungs- |
| Rehinted " | 27 | Light Op |
| good - | 167 | Light Op. |

5000 Records
has been done on this

| | | |
|---|---|---|
| Wages | | |
| Transfer + Print men | 107 | 91 |
| Inspection of Records | 12 | 57 |
| Filing in + numbering | 11 | 40 |
| Mould wipers | 57 | 27 |
| Buffing | 11 | 96 |
| Edging | 25 | 37 |
| Grafiting | 4 | 50 |
| General expense pay roll | 72 | 42 |
| Repair celluloid prints | 15 | 85 |
| " Metal moulds | 10 | 06 |
| XX | 12 | 17 |
| Sorting records on boards | 11 | 35 |
| Grimes Pay roll | 86 | 00 |
| Genl labor materials supplies | 268 | 00 |
| Grimes supplies | 37 | 56 |
| Celluloid + disc | 80 | 00 |
| Testing | 24 | 79 |
| Dimwiddie Platers | 16 | 43 |
| | $865 | 22 |

July 1st $1262.7

Blank + veneers delivered to Transfer room costs 11 cents
Return Value of discards 5 cents

Costs of working moulds per record 150 printed 90 records net is 2.85 per record,

Blank Costs

| | |
|---|---|
| Materials of blank | 3.54 |
| Varnish per 2 plates | 2.18 |
| Varnish costs 11.31 per pound | |

Blank Labor - 7000 daily

| | |
|---|---|
| Labor Moulding | 1.67 cents |
| Labor on Materials | 1.37 " |
| Steam + water | 0.41 |
| Material | 3.54 |
| I allow 7.25 | 6.99 |

(131)

| | | Cent |
|---|---|---|
| Cost flowing plates | (2) | 0.7 cent |
| " Washing " | (2) | 0.7 " |
| " Cyanide + KOH | (2) | 0.27 " |
| Inspection | | 0.25 |
| Oven. | | 0.01 |
| Nickle anng scraping Inspt | | 0.30 |
| per transfer | | 2.23 cents |
| Varnish | (2) | 2.18 |
| | | 4.41 |

Wages general supplies outside blank and plate flowing —

Cost of Blanks + Varnish 11 Cents

| | Wages | with Varnish |
|---|---|---|
| 2000. | 37.40 | 49.50 |
| 2500 | 29.95 | 39.95 |
| 3000 | 24.91 | 32.91 |
| 3500 | 21.38 | 28.38 |
| 4000 | 18.70 | 24.70 |
| 4500 | 16.66 | 22.00 |
| 5000 | 14.96 | 19.82 |
| 5500 | 13.61 | 18.04 |
| 6000 | 12.64 | 16.64 |
| 6500 | 11.48 | 15.21 |
| 7000 | 10.68 | 14.15 |

IIII IIII I

May 1914 —

| | |
|---|---|
| Disc Jobbers | 44 |
| Class A Dealers | 76 |
| Disc only Dealers | 395 |
| Disc & Cylinder Dealers | 1342 |
| Total Disc Dealers | 1737 |
| Cylinder Dealers only | 8133 |

1st 23

| | | |
|---|---|---|
| Disc Jobbers | 45 | |
| Class A | 99 | |
| Disc only | 439 | |
| Disc & Cy | 1391 | 1830 |
| Cylinder only | | 8033 |

C135

1200

1200
900.
490
309
618
3090
618
37.0

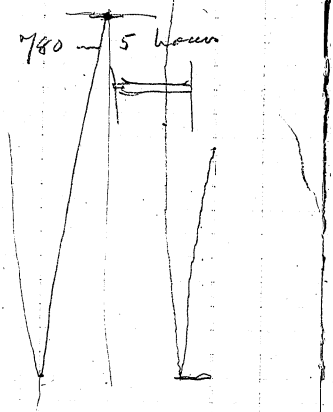
Upto June 1 1914 sold

| | | |
|---|---|---|
| A+B #60 | 3087 | |
| A 80 | 6162 | |
| A 150 | 5950 | |
| A 200 | 5212 | |
| A 250 | 6082 | |
| A 275 | 170 | |
| A 290 | 117 | |
| A 300 | 80 | |
| 375 | 76 | |
| 400 | 40 | |
| 425 | 53 | |
| 450 | 49 | 27078 |
| | Records | |
| 100 | 371 981 | |
| 150 | 234 345 | |
| 200 | 55 134 | |
| 250 | 29 920 | |
| 300 | 13 120 | |
| Adv | 1 255 | 705 755 |

C141

1726 Day
1704 —

780 — 5 hours



Lead but 3rd ave
425 amp 4800
about 210 000
marks, throw away

No 11 Blank

500 grams lead

442 grams Remington

458 in blank

Blank packed without jarring

Threw stick up & first leveller up

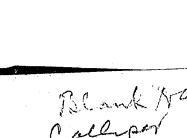
both fair burns

Remington = strength

Remington

2086
166
1920
120
38400
1920
230400

Blank No 11
Calliper




4088
20
8176

29.2
40
1168 | 490
40
4088
817
849.05

2920
1168
4088 | 490
2088
1688 | 120
3376
1688
3376
1688
5056

[145]

Blank

270

No 7

320

550

267.5

50,000

270

110000

No 10

271

47

281

257

388

296

175 2 point

275

258

268

175

550

314

8000

175

No 1 Point

60

Analogy

304

297

298

300